

Atty. Docket No. MP0249  
Serial No: 10/690,780

Amendment to the Abstract

Please replace the Abstract on page 38 with the following replacement Abstract:

Methods, circuits, architectures, software and systems for error detection in transmitted data. The method generally includes ~~the steps of (i) receiving digital information comprising data and non-data, the data comprising a plurality of data portions having a~~ including fixed length data portions, ~~(ii) removing at least one non-data portion; and (iii) if the data includes a remainder, adding a zero-pad vector to it to generate a zero-padded data portion, then checking the plurality of data portions and the zero-padded data portions for a transmission error. The circuit generally includes (a) a first logic circuit configured to detect non-data information; (b) a zero-fill circuit configured to replace at least a portion of the non-data information with a zero-pad vector; and (c) an error detection circuit configured to (i) detect a transmission error in data portions of the information and a zero-padded data portions of the information, the data portions and the zero-padded data portion having a fixed bit length; and (ii) combine the zero-pad vector with a remaining data portion of the information to form the zero-padded data portion. The architectures and/or systems generally include those that embody one or more of the inventive concepts disclosed herein, and the software is generally configured to implement steps in the present method. In the The present invention, the data portions and the zero-padded data portions generally have the same bit length. This feature enables a single error detection circuit to detect an errors on data of any unit length, thereby reducing the chip area dedicated to error detection, increasing the utilization efficiency of the circuitry on the chip, and reducing power consumption, and (possibly) improving system performance.~~